

3

1 Cumberland Co. 26-02
1993

26021993

State of North Carolina
Department of Environment,
Health and Natural Resources
Division of Solid Waste Management
Fayetteville Regional Office



James B. Hunt, Jr., Governor
Jonathan B. Howes, Secretary
William L. Meyer, Director

October 19, 1993

Mr. Steve McMull
Engineering & Housing
AFZA-DE-DV
Fort Bragg, North Carolina 28307

RE: Vertical Expansion Request
Fort Bragg Sanitary Landfill
~~XXXXXXXXXXXX~~

Dear Mr. McMull:

The Solid Waste Section has reviewed the "Request for Vertical Expansion" of the existing Municipal Solid Waste Landfill (MSWLF) submitted, by RS&H Architects-Engineers-Planners, Inc., on Fort Bragg's behalf and hereby conditionally APPROVES the continuation of operation of the referenced landfill according to the plans submitted to the Section. This approval allows Fort Bragg to continue to operate the landfill consistent with the proposed final contours only until such time as a transition plan has been evaluated. Proceeding with this approval is contingent upon receiving an approved Sedimentation and Erosion Control plan from Land Quality and implementing any and all erosion control devices before operation of the vertical expansion.

Transition for Existing MSWLF units

Section .1600, of the recently adopted rules for municipal solid waste landfills, defines existing MSWLF units as any municipal solid waste landfill unit that is receiving waste as of October 9, 1993. As an existing unit Fort Bragg will be subject to all the requirements of Section .1603 (a)(4)(A).

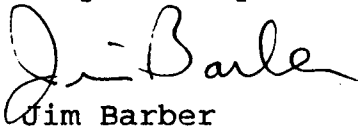
Section .1603 (a)(4)(A) requires that Fort Bragg submit an application by April 9, 1994 for continuing operation and closing the unit in accordance with Section .1617 (d), Transition plan for existing units. Section .1617 (d) ensures that landfills which received waste prior to and after October 9, 1993 comply with Subtitle D. All portions of the MSWLF unit under this approval will be subject to the requirements set forth in Rule .1617. Fort Bragg, or its consultant, shall prepare and submit the application in accordance with all the requirements of Paragraph .1617 (d) on or before April 9, 1994. Some of the requirements of Section .1617 (d) include the need for Fort Bragg to submit: an updated operation

Mr. Steve McMull
page 2
October 19, 1993

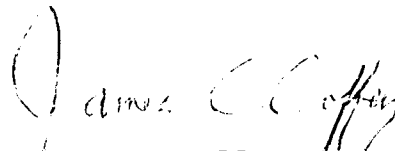
plan in accordance with Rule .1625; a closure and post-closure plan prepared in accordance with Rule .1629; and a water quality monitoring plan prepared in accordance with .1623 (b)(3). The information submitted will be reviewed in accordance with Rule .1603 (d)(2) and as stated previously, a determination shall be made concerning the continued operation of the landfill and schedule for closure.

Should you have questions concerning the issues contained in this letter please contact Jim Coffey at (919) 733-0692.

Respectfully,



Jim Barber
Eastern Area Engineer
Solid Waste Section



James C. Coffey, Supervisor
Permitting Branch
Solid Waste Section

cc: Terry Dover
Ikie Guyton
Bobby Lutfy

State of North Carolina
Department of Environment,
Health and Natural Resources
Division of Solid Waste Management

James B. Hunt, Jr., Governor
Jonathan B. Howes, Secretary



October 6, 1993

Mr. Steve McMull
Engineering & Housing
AFZA-DE-DV
Fort Bragg, North Carolina 28307

RE: Vertical Expansion Request
Fort Bragg Sanitary Landfill
Permit No. 26-02

Dear Mr. McMull:

The Solid Waste Section has reviewed the "Request for Vertical Expansion" of the existing Municipal Solid Waste Landfill (MSWLF) submitted, by RS&H Architects-Engineers-Planners, Inc., on Fort Bragg's behalf and hereby conditionally APPROVES the continuation of operation of the referenced landfill according to the plans submitted to the Section. This approval allows Fort Bragg to continue to operate the landfill consistent with the proposed final contours only until such time as a transition plan has been evaluated. Proceeding with this approval is contingent upon receiving an approved Sedimentation and Erosion Control plan from Land Quality and implementing any and all erosion control devices before operation of the vertical expansion.

Transition for Existing MSWLF units

Section .1600, of the recently adopted rules for municipal solid waste landfills, defines existing MSWLF units as any municipal solid waste landfill unit that is receiving waste as of October 9, 1993. As an existing unit Harnett County will be subject to all the requirements of Section .1603 (a)(4)(A).

Section .1603 (a)(4)(A) requires that Fort Bragg submit an application by April 9, 1994 for continuing operation and closing the unit in accordance with Section .1617 (d), Transition plan for existing units. Section .1617 (d) ensures that landfills which received waste prior to and after October 9, 1993 comply with Subtitle D. All portions of the MSWLF unit under this approval will be subject to the requirements set forth in Rule .1617. Fort Bragg, or its consultant, shall prepare and submit the application in accordance with all the requirements of Paragraph .1617 (d) on or before April 9, 1994. Some of the requirements of Section .1617 (d) include the need for Fort Bragg to submit: an updated operation

Mr. Steve McMull
page 2
October 6, 1993

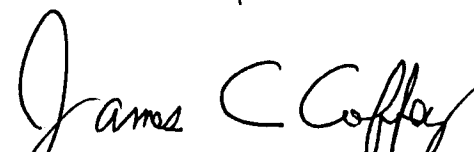
prepared in accordance with Rule .1629; and a water quality monitoring plan prepared in accordance with .1623 (b)(3). The information submitted will be reviewed in accordance with Rule .1603 (d)(2) and as stated previously, a determination shall be made concerning the continued operation of the landfill and schedule for closure.

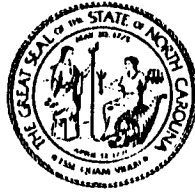
Should you have questions concerning the issues contained in this letter please contact Jim Coffey at (919) 733-0692.

Respectfully,

Jim Barber
Eastern Area Engineer
Solid Waste Section

cc: Terry Dover
Ikke Guyton
Bobby Lutfy


James C. Coffey, Supervisor
Permitting Branch
Solid Waste Section



State of North Carolina
Department of Environment, Health, and Natural Resources

512 North Salisbury Street • Raleigh, North Carolina 27604

James B. Hunt, Jr., Governor

Division of Solid Waste Management
Telephone (919)733-0692

Jonathan B. Howes, Secretary

July 19, 1993

Mr. Steve McMull
Engineering and Housing
AFZA-DE-DV
Fort Bragg, N.C. 28307

Re: Implementation Of Subtitle 'D' Ground-water Monitoring Program

Dear Mr. McMull,

The purpose of this correspondence is to provide information and clarification on the changes in ground-water monitoring requirements for MSWLF facilities that remain in operation after October 9, 1993. The recently adopted North Carolina Solid Waste Management Rules reflect significant changes for ground-water monitoring based on requirements of the E.P.A. Subtitle D Rules.

Attachment A to this letter provides a summary of important dates and significant activities that must be accomplished in order to be in compliance with the new rules. Attachment B contrasts existing and new ground-water monitoring and assessment requirements based on changes in the rules. Because of significant increases in costs that will be incurred in order to operate a MSWLF under the new Subtitle D Rules, including financial assurance and increased costs for ground-water monitoring and assessment, you may wish to seriously consider closing your sanitary landfill prior to October 9, 1993, when the new rules become effective.

When the new rules take effect, MSWLF facilities that have violations of the North Carolina Groundwater Quality Standards or facilities that show a significant statistical increase in the level of Appendix I constituents will quickly be required to implement assessment monitoring for all Appendix II constituents. Since the Groundwater Quality Standards are also used in establishing the ground-water protection standards, MSWLF facilities with violations may also rapidly move into assessment of corrective action alternatives based on a full-scale ground-water investigation to determine the nature and extent of contamination at the site.

If Fort Bragg chooses to continue to operate their MSWLF facility after October 9, 1993, then you need to begin planning and budgeting immediately for the activities outlined in Attachment A. A revised Water Quality Monitoring Plan must be submitted as part of the Transition Plan on or before April 9, 1994. The present monitoring system at the facility will require upgrading to meet the requirements of the new N.C. Solid Waste Management Rules for MSWLF facilities. All background sampling and related activities for the upgraded monitoring system must be completed and reported to the Division in order to demonstrate compliance with the new water quality monitoring requirements on or before October 9, 1994.

Please note that the goals and objectives for ground-water assessment monitoring and ground-water contamination investigations are the same under both the current and the proposed rules and shall be accomplished in a way that is protective of human health and the environment. However, current rules allow for greater flexibility in the assessment and investigation activities and the sample analytical costs could be substantially less using the constituent list required under current rules and policy as compared to analytical costs required by the new rules based on Subtitle D, which require sampling for the Appendix II list of constituents.

I hope this letter has been helpful in providing you more insight into the actions that will be required by Fort Bragg to maintain compliance with the water quality monitoring requirements of the Solid Waste Management Rules as we make the transition to the new rules growing out of the E.P.A. Subtitle D Regulations. If you have any questions or comments regarding this letter, please contact the Solid Waste Section at (919) 733-0692.

Sincerely,

Bobby Lutfy

Bobby Lutfy, Hydrogeologist

Solid Waste Section

cc: Isaiah Guyton

Attachments

ATTACHMENT A

Important dates and significant activities that must be accomplished in order to be in compliance with the new rules on ground-water monitoring at MSWLF facilities:

April 9, 1994: A Water Quality Monitoring Plan that fulfills the requirements of the new Solid Waste Management Rules must be submitted to the Division as part of the Transition Plan on or before April 9, 1994.

October 9, 1994: Compliance with the new ground-water monitoring requirements must be demonstrated to the Division on or before October 9, 1994. In order to demonstrate compliance, the MSWLF owner or operator must perform the following activities and provide documentation to the Division.

1. Upgrade the ground-water monitoring system so that it meets the criteria of the new rules for monitoring systems.
Rule .1631
 - (a) Monitoring wells shall be installed at the relevant point of compliance based upon the waste boundaries established on October 9, 1993. - Rule .1631(a)(2)
 - (b) Monitoring wells shall be designed and constructed in accordance with the applicable North Carolina Well Construction Standards as codified in 15A NCAC 2C. - Rule .1631(b)
2. In order to accurately determine ground-water elevations for each monitoring well, the wells shall have been accurately surveyed by a North Carolina Registered Land Surveyor.
- Rule .1632(d)(1)
3. In order to determine the rate of ground-water flow, the owner or operator shall provide data for hydraulic conductivity and porosity for the formation materials at each of the well locations. - Rule .1632(d)(2)
4. A minimum of four independent samples from each well (background and downgradient) shall be collected and analyzed for the Appendix I constituents during the first semiannual sampling event. - Rule .1633(b)
5. The owner or operator shall determine whether or not there is a statistically significant increase over background values for each parameter or constituent required in the particular ground-water monitoring program that applies to the MSWLF unit. - .1632(i)

ATTACHMENT B

Contrasts between the existing and proposed ground-water monitoring and assessment requirements based on changes in the Solid Waste Management Rules. All MSWLF units that are in operation on or after October 9, 1993, will be subject to the new rules.

EXISTING RULES

NEW RULES

Detection monitoring:

Monitoring frequency:
Semiannual monitoring

Monitoring frequency:
Semiannual monitoring

Monitoring parameters:
23 landfill constituents

Monitoring parameters:
Appendix I constituents

Data evaluation based on:
N.C. Groundwater Quality
Standards

Data evaluation based on:
N.C. Groundwater Quality
Standards and statistical
increase over background
levels

Post Closure Monitoring:

Length of time:
5 years and reevaluate need
for further monitoring

Length of time:
30 years and reevaluate need
for further monitoring

Monitoring parameters:
23 landfill constituents &
occasional VOCs

Monitoring parameters:
Appendix I constituents

Data evaluation based on:
N.C. Groundwater Quality
Standards

Data evaluation based on:
N.C. Groundwater Quality
Standards and statistical
increase over background
levels

Assessment monitoring and ground-water investigations:

Monitoring parameters:
23 landfill constituents,
VOCs, semi-VOCs

Monitoring parameters:
Appendix II constituents
(213 constituents)

Data evaluation based on:
N.C. Groundwater Quality
Standards

Data evaluation based on:
N.C. Groundwater Quality
Standards and statistical
increase over background
levels

Greater flexibility

Flexibility more limited